Record of Modification

Phase 1 Site Characterization Sampling and Analysis Plan Field Activities
Columbia Fall Aluminum Company RI/FS
Phase 1 SAP MOD #7

Instructions to Requester: **Submit to Roux RI Manager or Roux RI/FS Project Manager**
Roux RI Manager will maintain legible copies in a binder that can be accessed by personnel.

Project Work Plan/QAPP (check one)**:**

[X] 2015 Phase 1 SAP

[ ] SOP (Title, # and approval date): _____

Requester: Amy Hoffmann, Field Manager Date: 8/22/2016

Applicable section of SAP/SOP:

SAP Section 4.6.1 – Source Area Soil Investigation

Description of Modification:

Soil Borings CFSB-113 and CFSB-115 (see attached map) within the South Percolation Pond will be advanced using a hand auger rather than with a drill rig. If field personnel are not able to advance the sampling equipment to a depth of 12 feet to collect the 10 to 12 ft sample specified in the SAP, the soil sample will instead be collected from the deepest two-foot interval that can be achieved by the field personnel (estimated maximum depth of hand tools is 5-6 ft-bls).

Rationale for Modifications / Potential Implications of Modifications:

Due to the presence of surface water, portions of the South Percolation Pond are inaccessible with the sonic-rotary and/or direct-push drilling rigs. Proposed soil borings CFSB-113 and CFSB-115 are located within one of the inaccessible areas; therefore, these borings will be advanced using hand tools. Discrete soil samples will be collected in accordance with the SAP. However, as noted above, if the deeper soil sample interval (i.e., 10 to 12 feet) cannot be achieved via hand tools, the soil sample will be collected from the deepest two-foot interval that can be achieved. This change may limit the vertical delineation of soil quality at these two locations. However, it is noted that the six (6) other borings completed using drill rigs within the South Ponds achieved the 12 ft depth specified in the SAP. Thus, there will be other data to evaluate soil quality conditions at depths of 10 to 12 ft at multiple locations beneath the ponds. Additionally, data collected from these samples will be evaluated and discussed to determine if additional sampling will need to be addressed during phase II.

Duration of Modification (Check one):

[X] Temporary

Date(s) 8/22/2016

Sample Numbers CFSB-113 and CFSB-115

[ ] Permanent (Proposed Text Modification Section)

Effective Date: _____

Proposed Text Modifications in Associated Document:

Data Quality Indicator (check one) – Please reference definitions on next page for direction on selecting data quality indicators:

[ ] **Not Applicable** [ ] **Reject** [ ] **Low Bias** [ ] **Estimate** [ ] **High Bias** [X] **No Bias**

Roux Project Manager Approval: Michael Ritorto Date: 8/22/2016

(Roux RI/FS Project Manager or designate)

EPA Review and Approval: Mike Cirian Date: _____

(USEPA RPM or designate)

DATA QUALITY INDICATOR DEFINITIONS

Reject – Samples associated with this modification form are not useable. The conditions outlined in the modification form adversely affect the associated sample to such a degree that the data are not reliable.

Low Bias – Samples associated with this modification form are useable, but results are likely to be biased low. The conditions outlined in the modification form suggest that associated sample data are reliable, but estimated low.

Estimate – Samples associated with this modification form are useable, but results should be considered approximations. The conditions outlined in the modification form suggest that associated sample data are reliable, but estimates.

High Bias – Samples associated with this modification form are useable, but results are likely to be biased high. The conditions outlined in the modification form suggest that associated sample data are reliable, but estimated high.

No Bias – Samples associated with this modification form are useable as reported. The conditions outlined in the modification form suggest that associated sample data are reliable as reported.